

Water-Data Report 2008

08136700 Colorado River near Stacy, TX

Middle Colorado-Concho Basin
Middle Colorado Subbasin

LOCATION.--Lat 31°29'37", long 99°34'25" referenced to North American Datum of 1927, Coleman County, TX, Hydrologic Unit 12090106, on left bank at downstream side of bridge on Farm Road 503, 1.2 mi upstream from Bois d'Arc Creek, 1.8 mi northeast of Stacy, 10.5 mi downstream from O.H. Ivie Reservoir, 24.0 mi downstream from Concho River, and at mile 604.8.

DRAINAGE AREA.--24,193 mi² of which 11,391 mi² probably is noncontributing.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Mar. 1968 to current year. Prior to Oct. 1970, published as "at Stacy".

PERIOD OF RECORD.-Water-Quality.--

CHEMICAL DATA: Apr. 1968 to July 1994.
BIOCHEMICAL DATA: Apr. 1968 to Oct. 1977.
BIOLOGICAL DATA: Oct. 1974 to Oct. 1977.
PESTICIDE DATA: Apr. 1975 to Aug. 1977.
RADIOCHEMICAL DATA: Jan. 1981 to Feb. 1981.
SEDIMENT DATA: Oct. 1974 to Oct. 1977.
SPECIFIC CONDUCTANCE: Apr. 1968 to Sept. 1994.
TEMPERATURE: Apr. 1968 to Sept. 1994.

REVISED RECORDS.--WDR TX-81-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,394.66 ft above NGVD of 1929 (Texas Department of Transportation bridge plans). Satellite telemeter at station.

REMARKS.--Records good. Since installation of gage in Mar. 1968, at least 10% of contributing drainage area has been regulated by upstream reservoirs, and since Mar. 15, 1990, flow completely regulated by O.H. Ivie Reservoir (station 08136600), 10.5 mi upstream. There are many diversions above station for irrigation, municipal, and oil field operations. Wastewater effluent is returned to the river from numerous wastewater plants above station. At times flow may be slightly affected by discharge from the flood-detention pools of 42 floodwater-retarding structures with a combined detention capacity of 56,730 acre-ft. These structures control runoff from 277 mi² above this station. No flow at times. Some records listed in the "Period of Record" for surface water and water quality may not be available electronically.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1882, 356,000 ft³/s, Sept. 18, 1936, gage height, 64.59 ft, by slope-area measurement of peak flow. The flood of Sept. 18, 1936, was 4 ft higher than the 1906 flood and 7 to 8 ft higher than the 1882 flood, from information by local resident.

08136700 Colorado River near Stacy, TX—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	11	2.7	3.5	3.1	2.7	2.4	2.4	16	6.8	14	7.8	7.9
2	11	2.7	3.5	3.1	2.9	2.5	2.3	9.5	6.7	11	10	7.2
3	10	2.8	3.2	3.2	3.1	3.7	2.3	7.2	6.6	8.8	8.1	6.9
4	7.3	2.8	3.2	3.2	3.1	3.8	2.3	6.6	6.8	8.0	7.1	6.9
5	5.0	2.8	3.0	3.3	3.2	3.6	2.2	6.7	7.0	7.6	7.0	6.9
6	3.8	2.6	3.0	3.4	2.9	3.2	2.3	7.0	6.9	7.6	11	6.8
7	3.3	2.6	3.1	3.4	2.8	3.2	2.2	6.9	7.4	7.7	13	6.5
8	3.1	2.7	3.2	3.4	2.8	3.2	2.3	6.2	7.3	8.0	8.5	7.0
9	3.0	2.7	3.2	3.1	2.9	3.1	2.3	6.0	7.2	8.2	7.3	26
10	3.0	3.0	3.1	3.1	2.9	3.6	2.5	6.0	7.7	7.9	7.0	19
11	3.0	3.2	3.2	3.0	3.0	3.9	2.4	5.7	8.0	7.6	6.9	9.3
12	3.1	3.2	3.5	3.0	2.9	3.6	2.5	5.9	7.2	7.2	7.1	7.5
13	3.1	3.0	3.8	3.0	2.7	3.0	4.3	6.6	7.0	7.2	7.2	6.9
14	3.1	3.0	3.8	3.1	2.6	2.4	6.7	12	7.2	7.5	7.0	6.7
15	3.4	2.7	3.6	3.1	2.6	2.1	7.3	10	7.3	7.4	6.9	6.4
16	3.7	2.7	3.3	3.2	2.9	2.1	7.3	7.7	7.1	7.2	9.3	6.4
17	4.0	2.7	3.5	3.1	3.4	2.2	7.4	6.8	6.8	7.1	11	6.4
18	3.4	2.7	3.4	3.2	3.5	6.3	8.1	6.8	7.3	7.2	9.5	6.6
19	2.9	2.8	3.3	3.3	3.4	10	7.4	6.7	7.9	6.8	9.6	6.5
20	2.8	3.0	3.4	3.3	3.2	6.1	6.6	6.6	9.9	6.7	8.5	6.4
21	2.8	3.0	3.3	3.3	3.0	4.0	6.6	6.6	9.8	7.0	7.6	6.4
22	3.0	2.7	3.0	3.4	2.9	2.9	6.6	6.7	8.1	7.1	7.3	6.4
23	3.0	2.8	2.9	3.3	2.9	3.9	6.5	6.6	7.5	7.2	7.4	6.5
24	3.1	3.3	3.0	3.5	2.8	4.0	6.3	6.7	7.2	7.3	8.1	6.5
25	3.0	5.3	3.1	3.8	2.7	3.7	6.3	6.9	7.1	7.4	9.2	6.4
26	2.8	5.6	3.2	3.9	2.4	3.1	6.0	6.8	7.2	7.5	8.5	6.3
27	2.9	4.7	3.2	3.9	2.2	2.7	176	6.9	7.1	7.3	7.6	6.2
28	2.9	3.9	3.3	3.7	2.3	2.5	191	6.9	7.3	7.1	7.2	6.2
29	2.9	3.4	3.1	3.4	2.4	2.3	75	6.9	17	7.0	7.6	6.1
30	2.8	3.3	3.2	3.0	---	2.5	38	6.9	18	7.2	15	6.1
31	2.8	---	3.2	3.0	---	2.7	---	6.8	---	7.4	11	---
Total	125.0	94.4	101.3	101.8	83.1	108.3	601.4	227.6	242.4	240.2	266.3	233.3
Mean	4.03	3.15	3.27	3.28	2.87	3.49	20.0	7.34	8.08	7.75	8.59	7.78
Max	11	5.6	3.8	3.9	3.5	10	191	16	18	14	15	26
Min	2.8	2.6	2.9	3.0	2.2	2.1	2.2	5.7	6.6	6.7	6.9	6.1
Ac-ft	248	187	201	202	165	215	1,190	451	481	476	528	463

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	184	95.0	80.8	81.5	83.2	114	114	262	299	94.4	137	216
Max	1,475	1,344	562	470	666	732	873	1,440	1,783	623	1,516	2,953
(WY)	(1987)	(1975)	(1975)	(1975)	(1975)	(1987)	(1977)	(1987)	(1996)	(1987)	(1978)	(1980)
Min	3.49	2.58	2.07	2.09	2.19	2.78	0.41	0.00	0.00	0.00	2.24	0.00
(WY)	(2007)	(2007)	(1999)	(1999)	(1999)	(2000)	(1986)	(1984)	(1984)	(1974)	(1983)	(1983)

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SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1968 - 2008	
Annual total	3,105.4		2,425.1			
Annual mean	8.51		6.63		145	
Highest annual mean					719	1987
Lowest annual mean					6.22	2006
Highest daily mean	97	May 3	191	Apr 28	31,300	Sep 10, 1980
Lowest daily mean	2.0	Mar 5	2.1	Mar 15	0.00	Jun 22, 1974
Annual seven-day minimum	2.1	Mar 4	2.3	Apr 2	0.00	Jun 22, 1974
Maximum peak flow			742	Apr 27	45,000	Sep 10, 1980
Maximum peak stage			6.50	Apr 27	28.00	Sep 10, 1980
Annual runoff (ac-ft)	6,160		4,810		105,000	
10 percent exceeds	13		8.1		274	
50 percent exceeds	8.0		4.0		27	
90 percent exceeds	2.8		2.7		4.0	

